

APRIL 29.

The President, Dr. LEIDY, in the chair.

Twenty-seven persons present.

A paper entitled "New Fossils from the four groups of the Niagara Period of Western New York," by Eugene N. S. Ringueberg, was presented for publication.

*On the Digestion of Raw and of Boiled Milk.*—Dr. N. A. RANDOLPH referred to certain profound changes produced in milk by boiling. In this operation the casein is not coagulated, but there is an evolution of sulphuretted hydrogen (Schreiner), a diminution in the gaseous constituents of the fluid and a change in the amount of ozone present.

The most striking difference between raw and boiled milk lay in their respective responses to rennet, acids and alkalies.

At the body-temperature the firm coagulation of raw milk occurred almost immediately upon the addition of a neutral rennet solution, whereas boiled milk, under the same conditions, did not clot for a far longer period, and the coagula were not firm. On the other hand, dilute or strong acids were tenfold as active upon boiled as upon raw milk. Some time after making these experiments Dr. Randolph found that so far as acids and rennet were concerned, similar results had been obtained by Schreiner (*Chem. Centralbl.*, III. Folge, IX. Jahrg.), and he desired to present his observations in these particulars simply as confirmatory of those of that observer.

Upon the addition of dilute alkalies to boiled milk, the rise of cream was much more rapid and complete than in raw milk under the same conditions.

Artificial digestions showed that milk was more readily digested when raw than when boiled. This was further confirmed by a comparative examination and weighing (in over fifty cases, and in which he was aided by Dr. Roussel) of the contents of the stomach after raw and boiled milk had been, in different individuals, undergoing actual gastric digestion. In these cases the residue found in the stomachs of those persons receiving boiled milk was greater than the similar residue found in the stomachs where raw milk had been undergoing digestion for the same length of time.

The following were elected members: Messrs. J. L. Forwood, L. Woolman, John Eyerman, Edw. Jackson, E. J. Wheelock and Miss S. D. Atkinson.

Ernest André, of Gray, Haute Saône, France, was elected a correspondent.

The following were ordered to be printed:—